



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,127	02/06/2004	James M. Brugger	53951-119	8396
21890 7590 04/27/2007 PROSKAUER ROSE LLP PATENT DEPARTMENT 1585 BROADWAY NEW YORK, NY 10036-8299			EXAMINER KIM, SUN U	
			ART UNIT	PAPER NUMBER
			1723	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/27/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/774,127	BRUGGER ET AL.	
	Examiner	Art Unit	
	John Kim	1723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2007 and 05 April 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,6,7,9 and 21-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,6,7,9 and 21-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 January 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

Art Unit: 1723

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/12/07 and 4/5/07 has been entered.

2. Claims 1 and 22 are objected to because of the following informalities: "the filter media" on line 8 of claims 1 and 22 should be corrected to "a filter media". "a filter media" on line 12 of claims 1 and 22 should be corrected to "the filter media". Appropriate correction is required.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 6 and 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 6 and 25 are indefinite for failing to particularly point out whether a second cap is different and separate structure from an inlet cap. For examination purposes, a second cap is deemed same as an inlet cap.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any

Art Unit: 1723

evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-2, 4, 6-7, 9 and 21-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,784,768 (hereinafter referred to as Mathieu). Mathieu teaches a filter apparatus comprising a cylindrical housing (1) having removably attached inlet and outlet end caps (2, 2a) wherein each end cap has two ports (3 or 3a, 12) located radially adjacent to each other for entry or removal of medium or fluid; capillary fiber bundle (4, 5) separates filtrate chamber (10) from the internal lumens of capillary fiber bundle (4, 5) e.g. blood portion of the housing; and an outlet (11) is connected to the filtrate chamber (10) wherein a gap (9) between filter media (4, 5) and the outlet cap (2a) forms a headspace and the outlet cap (2a) has an outlet port (3a) and additional port (12) that are open to the headspace and a gap (8) between filter media (4, 5) and the inlet cap (2) forms a headspace and the inlet cap (2) has an inlet port (3) and additional port (12) that are open to the headspace (see figure 1-3; col. 5, line 63 – col. 7, line 43). Mathieu further teaches that gas is supplied to the membranes via hydrophobic membrane (13, 13a) inherently through an additional port to liquid supply (see figure 1; col. 5, lines 11-20; 47-53). Such a gas supply through an additional port (12) to liquid supply or liquid extraction in the liquid inlet port (3) or liquid outlet port (3a) will be mixed in the headspace by sheer gap provided between the filter media and the cap. Claims 1, 21 and 22 essentially differ from the filter apparatus of Mathieu in reciting that both outlet port and the infusion port being connected to housing to be open directly to headspace (claim 1), a dilution inlet directly connected to, and

Art Unit: 1723

terminating at, the blood outlet headspace (claim 21) and both the outlet port and the infusion port being connected to the housing to terminate at the headspace (claim 22). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the filter apparatus of Mathieu to provide direct connection of the dilution inlet to the outlet headspace or terminating at the outlet headspace in addition to outlet port for mixing of gas with liquid to gasify the liquid with oxygen as suggested by Mathieu (see col. 5, lines 11-20), since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70. Use of the ports as an inlet and/or outlet for different fluids are an intended use of the apparatus and these are not given patentable weight to the structural limitation without the positive recitation of the specific fluid source e.g. blood, dilution fluid, infusion fluid, etc. connected to specific ports.

Regarding claims 2 and 23, Mathieu teaches an infusion port (12) adjacent the outlet port (3a) (see Fig. 1).

Regarding claims 4 and 24, Mathieu teaches that the end caps (2, 2a) are fitted in sealing manner to a housing body (1) which are inherently removably attached to the end caps (see Fig. 1; col. 5, lines 64-67; col. 7, lines 65-66).

Regarding claims 6 and 25, Mathieu teaches an inlet cap (2) e.g. second cap having an inlet port (3) (see Fig. 1).

Regarding claims 7 and 26, Mathieu teaches a second port (12) adapted to receive dilution fluid radially adjacent the inlet port (3) (see Fig. 1).

Regarding claims 9 and 27, Mathieu teaches a cylindrical housing (1) (see Fig. 1; col. 5, lines 63-66).


Art Unit: 1723

7. Applicant's arguments with respect to claims 1-2, 4, 6-7, 9 and 21-27 have been considered but are moot in view of the new ground(s) of rejection.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Kim whose telephone number is 571-272-1142. The examiner can normally be reached on Monday-Friday 7 a.m. - 3:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
John Kim  
Primary Examiner  
Art Unit 1723

JK  
4/23/07